

# Notice of Allowability

Application No.

10/700,532

Examiner

Tho v Duong

Applicant(s)

LIN ET AL.

Art Unit

3743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/1/2004.
2. ☒ The allowed claim(s) is/are 1-16.
3. ☒ The drawings filed on 05 November 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

Tho v Duong  
Examiner  
Art Unit: 3743

### **DETAILED ACTION**

Receipt of applicant's response to the election of species requirement filed 12/1/2004 is acknowledged.

#### ***Allowable Subject Matter***

Claims 1-3 and 5-16 are allowed. Since the claim 1 is generic and allowable, the previous election of species requirement has been withdrawn. Claim 4 is now rejoined. Therefore, claims 1-16 are now allowed.

The following is an examiner's statement of reasons for allowance: the prior art of record either taken singular or in combination fails to disclose that each substrate includes one slot through out of two corresponding end plates of the same side for locating the connection portion, the corresponding end plates each includes an opening with respect to the slot for partially moving the curved portion, which has been described in the specification for shorting the distance between vertical member of the heat pipe and the heat sinks. Reference to Liu is the closest prior art, however, Liu does not disclose that the end plates includes an opening for partially moving the curved portion. In Liu's reference, the slot forms an opening at one end of the substrate and the slot is for locating the connecting portion. Therefore the opening is not capable for partially moving in the curved portion.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Li (US 6,796,373) discloses a heat sink module that has a U-shape heat pipe disposed inside a heat sink.

Liu (US 6,651,734) discloses a multi-element heat-dissipating module that has a heat pipe connecting two heat sinks together.

Chen (US 2003/0141041A1) discloses a tube style radiator structure for computer.

Lai et al. (US 20030173061A1) discloses a heat dissipation device with working liquid received in circulation route.

Lee et al. (US 20030230398A1) discloses a heat dissipation device having a U-shape heat pipe embedded in a substrate of a heat sink.

Chen et al. (US 6,394,175) discloses a top mounted cooling device using heat pipes.

Liu (US 20040226697A1) discloses a heat-dissipating module.

Liu (US 20030019610A1) discloses a rapidly self-heat conductive heat-dissipating module.

Goth et al. (US 5,699,853) discloses a combined heat sink and sink plate.

Shih (US 6,396,693) discloses a dual heat sink.

Goodman et al. (US 6,189,601) discloses a heat sink with a heat pipe for spreading of heat.

Yu (US 5,959,837) discloses heat-radiating structure for CPU.

Art Unit: 3743

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho v Duong whose telephone number is 571-272-4793. The examiner can normally be reached on M-F (first Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Bennet can be reached on 571-272-4791. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tho v Duong  
Examiner  
Art Unit 3743



TD  
December 10, 2004